

A METHOD AND SYSTEM FOR  
IMPROVING THROUGHPUT OVER  
WIRELESS LOCAL AREA NETWORKS  
WITH A DYNAMIC CONTENTION WINDOW

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ABSTRACT OF THE INVENTION

A method and system for increasing the overall network throughput over a wireless local area network (WLAN).

- 10 Specifically, in one embodiment of the present invention, the dynamic selection of an initial value for a contention window in the Distributed Coordinated Function (DCF) mode is determined according to the load conditions over the WLAN in a method and system. Stations and access points within a
- 15 WLAN monitor conditions within the network to establish an initial value for the contention window, also called a minimum contention window value, that is lower than that set by the IEEE 802.11 communication standard. Some factors to consider in determining the load conditions include but are
- 20 not limited to the following: number of transmissions; number of receptions; and number of collisions.